



The Arboretum Bulletin



The Arboretum and the War

By MRS. WALTER J. SCHIBIG
Secretary, Arboretum Foundation

THE University of Washington Arboretum was one of the first organizations to feel the early war repercussions. Long before Pearl Harbor all federal aid was withdrawn, leaving the Arboretum activities entirely dependent upon memberships and donations. Vital questions presented themselves to members and those responsible for the institution's guidance. Should the Arboretum be maintained in war time? Can the Arboretum be maintained in war time? Can the Arboretum fill any definite part in the nation's all-out-for-war program?

The Arboretum Foundation knew there were trying times ahead, as such a civic organization is likely to be forgotten in the more appealing avenues of war work. However, the basic principle underlying the present conflict is to preserve not only our heritage of freedom but our institutions that are the basic factors of America. Why, then, should we, as individuals, not work to preserve our home front as our armed forces fight on the war front?

Can the Arboretum be maintained in war times? Nearly every day in the week garden club members work at the Arboretum doing all types of field and greenhouse work, also book and record keeping. In this work garden club members readily grasp the opportunities presented to learn both practical and scientific methods of propagation, maintenance and a miscellany of other horticultural knowledge. Many hundreds of hours have been contributed and will continue to be contributed to maintain our Arboretum, as these garden club members not only think of this institution in the terms of civic pride and the heritage that one day will be their children's, but they strongly feel it to be their patriotic duty.

Can the Arboretum fill any definite part in the nation's all-out-for-war effort? It cannot be stressed with too much emphasis that the Arboretum can and is filling one of the most vital needs of our government. The firm foundation and working organizations already established and maintained by the foundation and members is the vital nucleus around which the war need for protective plant covering is being established under the Office of Civilian Defense. Garden club women are working hundreds of hours on plant propagation for war requirements. A work registry has been kept at the Arboretum since August 1 and everyone is requested to register.

Under the supervision of Mrs. Swift Baker, the volunteer help is being co-ordinated. Mrs. Baker has been working six days a week and her efforts are inspirational and tireless. Listed in the work registry from August 1 to October 7, 1942, are the following garden club organizations: Seattle Garden Club, Lake Washington Garden Club, Arboretum

Unit No. 2 and the Federated Clubs represented by the following: Montlake, Better Gardens, North University, City Wide, Tamarisk, View Ridge, North End, Hillcrest, Amateurs and Lake Forest Park. The names of individuals and the hours listed are compiled from the volunteer work registry.

Name	Hours	Name	Hours
Mrs. Geo. T. Williams.....	37	Mrs. Byron Lane.....	4½
Mrs. C. C. Chambers.....	30	Mrs. G. A. Christenson.....	4½
Mrs. H. Patrick.....	26	Mrs. Harry Merrill.....	4½
Mrs. C. Haskell.....	26	Jean Merrick	4
Mrs. Florence Kleinhans..	26	Sue Merrick	4
Mrs. Ida Bock.....	21	Mrs. J. N. Merrick.....	4
Mrs. Myrtle Overton.....	17	Mrs. Loren Grinstead.....	4
Mrs. Geo. Henderson.....	16	Mrs. Henry Bittman.....	4
Mrs. B. Roy Anderson.....	14	Mrs. Alexander Hepler....	4
Mrs. Laura Penniston.....	14	Mrs. A. W. Sert.....	4
Mrs. Henry C. Field.....	14	Mrs. Roy Rader.....	4
Mrs. O. E. Dreyer.....	12½	Mrs. G. I. Birchfield.....	4
Mrs. H. C. Jones.....	12	Mrs. Hallie Lamphere.....	4
Mrs. Carl Ballard.....	9	Mrs. O. R. Magnuson.....	4
Mrs. Burle D. Bramhall....	9	Mrs. N. R. O'Farrell.....	4
Mrs. Geo. Swift.....	9	Mrs. Paul Wilson.....	4
Mrs. Don Palmer.....	9	Mrs. W. E. Ryan.....	4
Mrs. L. C. Henry.....	9	Mrs. Fred Bunge.....	4
Mrs. H. A. Jacobs.....	8½	Mrs. N. R. Murphy.....	4
Mrs. B. McClellan.....	8½	Mrs. J. E. Erickson.....	4
Mrs. D. T. Huffman.....	8½	Mrs. C. W. Gehrke.....	4
Mrs. A. Oberg.....	8½	Mrs. Walter Powell.....	4
Mrs. B. Bustinduy.....	8½	Mrs. Anna Milburn.....	4
Mrs. Van Cruyning.....	8½	Mrs. E. F. Hooper.....	3
Mrs. Kerry Trimble.....	8½	Mrs. Chas. F. McKeehan..	3
Mrs. P. McClelland.....	8½	Mrs. A. S. Wade.....	3
Mrs. J. P. Robertson.....	8½	Mrs. C. W. Gracey.....	3
Mrs. T. E. Gillen.....	8½	Mrs. A. R. McLean.....	3
Mrs. Ray Weigel.....	8½	Mrs. E. M. Niles.....	3
Mrs. C. S. Cowan.....	8½	Mrs. Alice M. Phipps.....	3
Mrs. L. R. Cleve.....	8½	Mrs. J. Rowe.....	3
Mrs. Howard Thompson..	8½	Mrs. William Wilber.....	3
Mrs. Clarence Brown.....	8½	Mrs. William O'Toole.....	3
Mrs. J. J. Gose.....	8½	Mrs. J. W. Oakley.....	3
Mrs. E. W. Ross.....	8½	Mrs. Grace Peterson.....	3
Mrs. F. Chadwick.....	8	Mrs. W. O. Brown.....	3
Mrs. D. L. Whiting.....	7½	Mrs. Walter L. Healey.....	3
Mrs. Rufus Bishop.....	5	Mrs. F. W. Crosby.....	3
Mrs. Albert Johnson.....	5	Mrs. L. Personcus.....	3
Mrs. H. C. Franzheim.....	4½	Mrs. F. E. Johnstone.....	3
Mrs. Hugh Brady.....	4½	Mrs. J. B. Dore.....	3
Mrs. G. T. Young.....	4½	Mrs. Chas. Chaffe.....	3
Mrs. A. J. Bauhin.....	4½	Mrs. J. Hittman.....	3
Mrs. A. S. Senn.....	4½	Mrs. C. J. Freeman.....	2
Mrs. E. V. Soderberg.....	4½	Mrs. L. C. Jamieson.....	2
Mrs. Hazel Husband.....	4½	Mrs. R. R. Mathews.....	2
Mrs. J. N. Wernli.....	4½	Mrs. R. S. Stule.....	2
Mrs. R. B. Walkinshaw....	4½	Mrs. James Conlon.....	2
Mrs. Hugh Brady.....	4½	Mrs. Chas. Lowry.....	2
		Mrs. A. E. Hedburg.....	2

The Arboretum Foundation thanks all supporters and members who have contributed to its maintenance during trying times, making it possible now to assist our United States Government.

War Times and a Ten-Point Plant System

By ALBERT WILSON

Botanist and Garden Consultant of the San Francisco Bay Region

‘FOOD will win the war,’ a motto of the last war and one assuming prominence today, rests upon the successful harvest of a great variety of crop plants. Even in the home garden extensive selection in vegetables, berries, small fruits and orchard trees is possible, and success may be attained in quite limited areas.

The rules for success in raising food plants are similar to those for ornamental plants and the following ten points may guide one toward reaching the desired goal:

1. Preparation of the soil must be thorough and deep to provide a properly loosened and broken medium. This condition must prevail for all types of soil in all planting areas. Loosened soil means aerated soil and soil atmosphere is as important to root health as fresh air is to the human being. Loose soil benefits the roots by making possible the proper exchange of gases.
2. Free and generous use of humus materials and organic fertilizers should be the rule for every garden. Dairy fertilizers which contain abundant strawy materials will improve the fertility of any soil, and all gardens benefit by their introduction. When fertilizers are not available, humus used alone will bring up the fertility of the soil. Here is where the compost heap comes into its own and every gardener should possess one.
3. Mulching is most helpful to successful plant growth. In one operation mulching solves the problem of weed control, cultivation, erosion and at the same time assures a banner crop. Mulching the plants with the materials of the compost will conserve moisture at the root zone where it is most needed. Water first, then cultivate to break the capillary action, then cover with mulching materials. Incidentally, the mulch should never be packed around the roots, but rather should be left loose and thick enough to check the sun's rays and wind activity.
4. The garden area should be in a well-lighted place, preferably a sunny spot, for the presence of light upon the soil can do a lot of good things for that soil. Then, too, green leaves manufacture food only in the presence of sunlight; sunlight means the manufacture of starch and sugar which in turn means development of flowers, sweet fruit (vegetables) and production of good seeds.
5. Warmth: Cold drafty spots are taboo; prepare sheltered conditions where necessary and give plants protection from vicious winds and low temperatures.
6. Water for plant growth is vital; apply it when needed, water deeply but do not overwater nor let the plants become distressed for lack of it.
7. Freedom from pests must be assured the growing plants. Two excellent methods make this possible. Keep the plants healthy and vigorous as healthy plants rarely succumb to insect or fungus attack. Secondly, a regular program of spraying against insect intruders may be resorted to. Home remedies such as soapy wash water, water and coal oil, etc., sprayed upon the foliage of plants will check many an insect set upon destruction. Innumerable commercial products are available, but here again the proper ingredient must be applied to the type of insect or disease present. (Dead fish in gopher holes chase these rodents out of any garden.)
8. Each gardener should know his garden, his particular “acre of land.” Know where the sun falls upon it, and how intense, and, too, understand the shady areas.

Certain plants demand more hours of sunlight than others and thorough familiarity with one's garden oftentimes saves labor, plant losses and disappointments.

9. A gardener should work with Nature, doing well the right job at the right time. Plants respond to seasons and certain tasks must be performed at certain periods. If things are not done when Nature demands they should be done, the loss is soon felt by the plant and failure may result. The gardener should attack only as much work as he can do properly without murderous exertion. Too much work leads one to hurry; it is better to work within your capacity; there is always another day, and planned work yields better results.
10. Today a greater selection in plant materials is possible and home gardeners should avail themselves of plants offering both fruit and beauty. Selections may be made from persimmons, nuts, apples, crab apples, grapes, rhubarb, peaches, plums, cherries, potatoes, and a galaxy of vegetables, old, new and delicious types. Individual taste is possible through selection and all should direct their efforts toward the simple, the plain and the beautiful. It is indeed an all-out effort for the war, and after this war things may be subject to changes, but now let Nature assist you and sustain you in your outlook during these troubled days. In your garden, seek rest and escape, for there there are to be found only rewards, never penalties.

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Notes on Two Interesting Plant Species

By ELIZABETH M. BLACKFORD

Pittosporum Tobira

SOME of the greatest thrills that I have had in my garden have come through the successful culture of several shrub species that one ordinarily associates with more southern climes—California and Florida. On winter trips into the southland I have always taken great joy from the beautiful trees and shrubs that grace the landscape—here as individual specimens, there in luxuriant masses, and again in hedge plantings. One shrub in particular, one which captured my attention years ago by virtue of its glossy green foliage and heavenly flower fragrance, was *Pittosporum tobira*, a form which unfortunately has no recorded common name.

Inquiry at one of the California nurseries revealed that the species most assuredly would withstand the Puget Sound climate, whereupon I decided to give it and several other exotic species a trial in my garden just above Lake Washington. Of all of that shipment, and succeeding ones as well, this plant, *Pittosporum tobira*, has proved the most satisfactory. Indeed, after several winters of success with various other uncommon shrubs, this one alone remained to live and thrive after the severe winter of 1941-1942. From the standpoint of hardiness, and in view of its many other pleasing qualities, *P. tobira* can be highly recommended for use in gardens of the Northwest.

The generic name *Pittosporum* is derived from the Greek for “pitch seed,” alluding to the gummy seed coat. *P. tobira* seldom sets seeds with us, however, and even if it did, propagation by cuttings would still be preferred because of the wide range of variation among true seedlings.

The shrub itself, often used for hedges in California, may attain a height of ten feet. The glossy green foliage and the clusters of small, waxy flowers which appear here in May and June are its outstanding attributes, that is, aside from the fragrance of the blooms. The lovely fragrance resembles that of orange blossoms rather closely and it fairly fills the air over wide distances.

My plants were placed in acid soil adjacent to the front doorway. I have given them the same treatment that rhododendrons require and they have responded beautifully. All of them are now robust, broad and spreading, with lustrous, healthy leaves. Their adaptation to our climate has been perfect. Just remember to give them plenty of water during the summer season.

Besides *P. tobira*'s use in a spring garden, its dense, ever-green foliage would become any winter landscape. I am convinced that here is a shrub which could be of wide ornamental use for year 'round effects in Puget Sound gardens.

Liquidambar formosana

Four years ago I purchased what I thought was a specimen of *Liquidambar styraciflua*, the beautiful sweet gum of southern and south-central United States. However, as the leaves developed that first spring, I realized that it was something quite different. Imagine my pleasure when I learned from Dr. Hanley that it was one of the few specimens in the Northwest of another beautiful species of the same genus (*L. formosana*) from China and Formosa.

L. formosana is a beautiful tree and a rapid grower. It has developed from a height of six feet to about twenty feet in four years. The foliage, which appears among the last in my spring garden, is quite dense and beautifully colored, the tips of the individual leaves becoming quite red. This color is partially carried throughout the summer season. However, the fall color is not as brilliant as that of the native sweet gum. Because of the apparent rarity of *L. formosana*, I am watching the development of this specimen with great interest.

Lilies in Eastern Washington

By MRS. C. R. WILLIAMS

Methow, Washington

OF ALL the various kinds of hardy lilies that can be grown in Eastern Washington, the one considered by many to be the loveliest and most graceful is *L. testaceum*, the Nankeen Lily. The fact that it is truly hardy and of very easy culture most certainly warrants more wide-spread usage. The color of the beautiful, reflexed petals is a warm tone of apricot, against which the long stamens with their deep orange anthers stand out perfectly. Because of the delicateness of the color it must be planted in a mixed border where other brighter colors abound. An excellent combination can be had by using it with the light blue shades of *delphinium* or with the pure white of *Lilium candidum*, which it resembles in both texture and form.

Because of our dry, hot weather during the growing season, it is necessary to make frequent use of artificial watering. It is essential that the watering be done deeply and thoroughly, hence the absolute need for good drainage.

I have planted *Lilium testaceum* in partial shade, about ten inches deep, in a bed that had been prepared to a depth of eighteen inches and into the bottom of which had been placed a considerable layer of coarse gravel. The soil was a good garden loam mixed with equal quantities of leaf mold. A five-inch layer of it was placed on top of the gravel in the bottom of the eighteen-inch bed. I then put a one-inch layer of sand on top of this before setting the bulbs in place and covering them with the remainder of the soil. This may seem like too much drainage in the light soils which most of us have in this section, but I have been well repaid. My lilies have grown to a height of five and one-half feet and flowered beautifully during the first two weeks in June.

L. testaceum is one of the hybrids which, though infertile, can be propagated by means of the bulb scales. Pull the

scales off the mother bulb and plant them in damp sand. In six or eight weeks the tiny bulblets will form at the base of each scale.

Plant the bulbs in October, eight to ten inches deep, and mulch the bed with leaf mold.

Other Types That Are Easily Grown

I have used several other forms of hardy lilies in my garden and have had real success with them. A species which is very enjoyable is *Lilium tennifolium*. I have it planted in several different locations varying from full shade to full sun. With such an arrangement it is possible to prolong the blooming period materially. Those which are planted in full sun begin blooming the first of May, while those growing in the shade are delayed so that the last of them appear with the Regals in June.

With careful planning one may have lilies blooming the entire summer. In July, *L. Henryi*, which never fails to flower luxuriantly, is followed closely by the lovely *L. speciosum magnificum* and, last but not least, come the brilliant white trumpets of *L. philippinense formosanum* with their beautiful pale green throats.

It is very easy to raise all of these lilies in Eastern Washington. They require only a moderate amount of care and there should be many more of them in our gardens.

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Garden Notes

From Victoria Horticultural Society for October, 1942

THIS is the month for cleaning up the garden, gathering leaves, cutting back the dead tops of perennials, pruning—particularly the removal of old fruiting wood from blackberries and other bush fruits, digging, dividing, transplanting perennials, planting flower beds for spring display and lifting dahlias, gladiolas, Montbretias and vegetables for winter storage. Late potatoes should be lifted at once. Leeks and celery may be earthed up to blanch the stems. Remove dead and dying lower leaves from Brussels sprouts to prevent rotting the sprouts. Finish planting spring cabbage right away.

Here is a check list of the most popular plants for spring bedding. Siberian Wallflowers (*Cheiranthus*), Wallflowers, Forget-me-not (*Mysotia*), Primroses, Polyanthus, White Rock (*Arabis*) Iceland Poppy, Sweet William, Aubretia, Pansies, Brompton or Winter Flowering Stocks (in mild locations), together with spring flowering bulbs, planted together or separately. Plant without further delay.

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Bracken Fern for Mulching

MR. GUS MARTIN, gardener on the James Brennen estate in Woodway Park, has been using bracken ferns very effectively for mulching purposes. They are particularly good because they provide a light, loose, well aerated layer that does not mat down tightly against the surface of the soil. This latter fault is often encountered when undecomposed tree leaves are used. The bracken is particularly good among rhododendrons. It does a very effective job of keeping down the weeds.

According to Mr. Alfred Fredrickson, the best way to handle the bracken is to cut it during the growing season, permit it to dry, stack it in piles and let it lie out of doors until the following spring, when it can be applied to the surface of the beds.

"I have also found," says Mr. Fredrickson, "that they are a very good protection from drafts and freezing. Heavy leaf mulch, particularly if large leaves, holds the moisture to be frozen at the surface, whereas the bracken allows ample drainage and does not hold moisture to be frozen into ice on the surface."

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